

**WHAT IS CLAIMED IS:**

1           1. For use in a code division multiple access communication system having a  
 2 source base station and a destination base station where a specified mobile station  
 3 establishes a connection with the source base station, a method comprising:  
 4           initiating a handover of the connection involving the specified mobile station to  
 5 the destination base station; and  
 6           establishing a start position of a synchronization search window for the specified  
 7 mobile station with reference to a perceived geographical location of the mobile station.

1           2. The method of claim 1, wherein the perceived geographical location is a  
 2 geographical coordinate position of the mobile station.

1           3. The method of claim 1, wherein the step of establishing the start position  
 2 involves determining a distance from the base station to the perceived geographical  
 3 location of the mobile station.

1           4. The method of claim 1, further comprising determining the perceived  
 2 geographical location of the mobile station at a radio network control node of a code  
 3 division multiple access communication system.

1           5. The method of claim 4, further comprising communicating the start time  
 2 position from the radio network controller node to the destination base station.

1           6. For use in a code division multiple access communication system having a  
 2 source base station and a destination base station where a specified mobile station  
 3 establishes a connection with the source base station, a method comprising:  
 4           initiating a handover of the connection involving the specified mobile station to  
 5 the destination base station; and  
 6           establishing a start position of a synchronization search window for the specified  
 7 mobile station with reference to a calculated distance of the mobile station from the  
 8 destination base station.

1           7. The method of claim 6, wherein the step of establishing the start position  
2 includes calculating a distance from a geographical coordinate position of the mobile  
3 station to a geographical coordinate position of the destination base station.

1           8. The method of claim 6, further comprising calculating the distance of the  
2 mobile station from the destination base station at a radio network control node of a  
3 code division multiple access communication system.

1           9. The method of claim 8, further comprising communicating the start time  
2 position from the radio network controller node to the destination base station.

1           10. A telecommunications system comprising:  
2           a source base station;  
3           a destination base station having a synchronization searcher;  
4           a synchronization start position determination unit which establishes a start  
5 position of a synchronization search window for the synchronization searcher of the  
6 destination station, the synchronization search window being used to detect a  
7 transmission of a specified mobile station received at the destination base station during  
8 a handover of a connection involving the specified mobile station from the source  
9 station to the destination base station, the synchronization start position determination  
10 unit establishing the start position of the synchronization search window with reference  
11 to a perceived geographical location of the mobile station.

1           11. The apparatus of claim 10, wherein the perceived geographical location is a  
2 geographical coordinate position of the mobile station.

1           12. The apparatus of claim 10, wherein the synchronization start position  
2 determination unit establishes the start position using by calculating a distance from the  
3 base station to the perceived geographical location of the mobile station.

1           13. A telecommunications system comprising:  
2           a source base station;  
3           a destination base station having a synchronization searcher;

4 a synchronization start position determination unit which establishes a start  
5 position of a synchronization search window for the synchronization searcher of the  
6 destination station, the synchronization search window being used to detect a  
7 transmission of a specified mobile station received at the destination base station during  
8 a handover of a connection involving the specified mobile station from a source base  
9 station to the destination base station, the synchronization start position determination  
10 unit establishing the start position of the synchronization search window with reference  
11 to a calculated distance of the mobile station from the destination base station.

1 14. The apparatus of claim 13, wherein the synchronization start position  
2 determination unit establishes the start position by calculating a distance from a  
3 geographical coordinate position of the mobile station to a geographical coordinate  
4 position of the destination base station.

1 15. The apparatus of claim 14, wherein the synchronization start position  
2 determination unit calculates the distance of the mobile station from the destination base  
3 station at a radio network control node of a code division multiple access  
4 communication system.

1 16. The apparatus of claim 15, wherein the radio network controller node  
2 communicates the start time position to the destination base station.

1 17. A synchronization start position determination unit situated at a node of code  
2 division multiple access communication system comprising, the synchronization start  
3 position determination unit serving to establish a start position of a synchronization  
4 search window for a synchronization searcher of a destination base station, the  
5 synchronization search window being used to detect a transmission of a specified  
6 mobile station received at the destination base station during a handover of a connection  
7 involving the specified mobile station from a source base station to the destination base  
8 station, the synchronization start position determination unit establishing the start  
9 position of the synchronization search window with reference to a perceived  
10 geographical location of the mobile station.

1           18. The apparatus of claim 17, wherein the perceived geographical location is a  
2 geographical coordinate position of the mobile station.

1           19. The apparatus of claim 17, wherein the synchronization start position  
2 determination unit establishes the start position using by calculating a distance from the  
3 base station to the perceived geographical location of the mobile station.

1           20. A synchronization start position determination unit situated at a node of code  
2 division multiple access communication system comprising, the synchronization start  
3 position determination unit serving to establish a start position of a synchronization  
4 search window for a synchronization searcher of a destination base station, the  
5 synchronization search window being used to detect a transmission of a specified  
6 mobile station received at the destination base station during a handover of a connection  
7 involving the specified mobile station from a source base station to the destination base  
8 station, the synchronization start position determination unit establishing the start  
9 position of the synchronization search window with reference to a calculated distance of  
10 the mobile station from the destination base station.

1           21. The apparatus of claim 20, wherein the synchronization start position  
2 determination unit establishes the start position by calculating a distance from a  
3 geographical coordinate position of the mobile station to a geographical coordinate  
4 position of the destination base station.

1           22. The apparatus of claim 20, wherein the synchronization start position  
2 determination unit calculates the distance of the mobile station from the destination base  
3 station at a radio network control node of a code division multiple access  
4 communication system.

1           23. The apparatus of claim 22, wherein the radio network controller node  
2 communicates the start time position to the destination base station.